Conversion of toxic organic compounds into electricity by micro organisms

5207. SHRI RAMA MUNI REDDY SIRIGIREDDY: Will the Minister of POWER be pleased to state:

(a) whether it is a fact that some micro organization convert toxic organic compounds such as Toluene into electricity;

(b) if so, the details thereof;

(c) whether the Ministry has carried out any study/research on this; and

(d) if so, the details of such study/research?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA): (a) and (b) Department of Biotechnology have informed that Micro-organisms cannot convert toxic organic compounds such as toluene to electricity. However, microorganisms can convert organic compounds to inflammable gases such as methane, hydrogen which can be used as fuel.

(c) and (d) No study has been carried out on this so far.

Need forTechnical Improvement in Power Sector

†5208. SHRI RAM JETHMALANI:
SHRI RAJIV RANJAN SINGH 'LALAN':

Will the Minister of POWER be pleased to state:

(a) whether it is a fact that there is a scope of vast improvement in the technical field of powering the country;

(b) whether Government have identified the fields like distribution, transmission and production for the technical improvement; and

(c) if so, assessment of the increase in availability of power in the above s^id. fields after the technical improvement?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA): (a) to (c) Technology upgradation is

†Original notice of the question was received in Hindi.

a continuous process to meet the growing requirement of demand of power and give the benefits of cost effectiveness, increased reliability, durability of equipments and higher availability of systems improving the performance of power sector as a whole either through research & development or import or technology. To keep abreast with the latest technological advancements, innovations, expertise and other techniques available globally in the field of generation, transmission and distribution and keep continuous interaction with various stakeholders, a Standing Committee on Research & Development comprising of experts from various organizations under Chairman, CEA with DG, 'CPRI as Convener has drawn up a perspective plan on R&D in the power sector. It has identified for special emphasis among othei things, adoption of super critical parameters for thermal generation; circulating fluidized bed technology; use of flexible AC transmission (FACTS) for controlling the impedance of line; upgrading/operating of existing lower voltage transmission; solving silt erosion problems/ monitoring cavitations causing erosion and hydro environment interface in the field of hydel power generation; adoption of user friendly software for distribution system, planning & analysis to suit the Indian conditions etc.

Technology upgradation is likely to enhance efficiency and reliability of power system leading to higher availability and better performance of power sector.

Rural electrification in H.P. and U.P.

5209. SHRI ANIL SHARMA: Will the Minister of POWER be pleased to state:

(a) how many villages of Himachal Pradesh and Uttar Pradesh have been electrified during last three years;

(b) by when the remaining villages will be electrified in these States;

(c) whether all the villages of District Jaunpur in Uttar Pradesh have also been electrified;

(d) whether it is a fact that villages Miyanchak, Ghughuri and Sultanpur of Khutahan Block (District Jaunpur) of Uttar Pradesh have not been electrified so far; and